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IDENTITY OF THE MOTH  
"STRETCHIA" BEHRENSIANA (GROTE)  
WITH NEW SYNONYMY  
(NOCTUIDAE)

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UNTIL PRESENT TIMES, "*Stretchia*" *Behrensiana* (Grote) has been considered a mystery. It was the author's intention to bring this matter into print years ago, but the manuscript was misplaced until recently.

"*Stretchia*" *behrensiana* is a name that is representative of an uncommon form of the species concerned, and as *Orthosia macona* (Smith) is the more recent name representing the same entity, it will have to fall into synonymy of *behrensiana*. The primary clue which led to the proper identification of *behrensiana* is the colored illustration presented by Hampson (1905). Until this colored illustration of the type female (pl. 89, fig. 10) of *behrensiana* was properly associated, the name had been applied to several genera, none of which are correct by present day concepts. The moth concerned is a typical *Orthosia*, and therefore it is placed as a new combination within *Orthosia*.

In the past few years, a number of specimens have been collected in central California that match Hampson's (op. cit.) colored illustration of the type. Illustrated by figures 1-4, one can see the major range in the maculation of the primaries of *behrensiana*. Under the redescription, the variation in coloration of the imago is given.



Fig. 1 *Orthosia behrensiana* (Grote), female. Anderson Springs, 4 miles northwest of Middletown, Lake County, California, 21 February 1954 (W. R. Bauer). This specimen matches type and is in the collection of the British Museum of Natural History, London.

Fig. 2 *O. behrensiana*, female. Cobb Mountain, Lake County, California, 12 February 1955. (W. R. Bauer and J. S. Buckett). This specimen also in British Museum of Natural History.

- Orthosia behrensiana* (Grote), New Combination  
*Graphiphora Behrensiana* Grote, 1875. *Canad. Entomol.* 7(4):71-72.
- Perigrapha behrensiana*, Grote, 1881. *Canad. Entomol.* 13(6):133; Smith, 1889. *Proc. United States Nat. Mus.* 12:493-494.
- Stretchia behrensiana*, Smith, 1891. *Trans. American Entomol. Soc.* 13:120; 1893. *Bull. United States Nat. Mus.* No. 44, p.208; Dyar, 1903 (1902). *Bull. United States Nat. Mus.*, No. 52, p.167; Woodworth, 1912. *California Monthly Bull.* 1(10):789 (indicates *Xylomania*, after Hampson's concept); McDunnough, 1938. *Mem. Southern California Acad. Sci.* 1:75.
- Xylomania behrensiana*, Hampson, 1905. *Cat. Phalanae British Mus.* 5:390 plus pl. 89, fig. 10; Woodworth, 1912. *California Monthly Bull.* 1(10):789 (cites as a *Stretchia*, in italics).
- Xylomiges behrensiana*, Barnes and McDunnough, 1917. Check list of the Lepidoptera of Boreal America, p.53; Draudt (in A. Seitz), 1923. *The Macrolepidoptera of the World*, Div. 2, vol. 7, p.15, pl. 22, row f.
- Taeniocampa macona* Smith, 1908. *Ann. New York Acad. Sci.* 18(2), part 2: 102-103; Rindge, 1955. *Bull. American Mus. Nat. Hist.* 106(2):119.
- Orthosia macona*, Barnes and McDunnough, 1917. Check list of the Lepidoptera of Boreal America, p.54; Draudt (in A. Seitz), 1923. *The Macrolepidoptera of the World*, Div. 2, vol. 7, p.159; McDunnough, 1938. *Mem. Southern California Acad. Sci.* 1:76. New Synonymy.
- Male: Ground color of primaries dorsally varying from pale tan to dark brown; secondaries dorsally off-white, irrorated with varying degrees of dark brown scales.
- Head with vertex clothed in admixture of tan and dark brown elongate simple hairs; frons clothed in almost uniformly tan colored elongate simple hairs, integument evenly truncately rounded; labial palpi exterolaterally clothed in blackish scales and hairs, ventrally clothed in elongate tan and sparsity of black simple hairs terminal segment minute; antennae with scape and pedicel clothed in short, broad white to tan scales; flagellomeres biserrate-fasciculate, serrations becoming less pronounced terminally, dorsally clothed in tan simple, dentate scales.
- Thorax with collar nearly unicolorous tan, composed of elongate simple hairs, terminal segment minute; antennae with scape and



Fig. 3 *O. behrensiana*, male. Summerland, Santa Barbara County, California, 24 January 1948 (C. W. Kirkwood).

Fig. 4 *O. behrensiana*, female. Ojai, Ventura County, California, 16 June 1957 (W. E. Simonds).

clothed anteriorly in blackish and tan elongate simple hairs, posteriorly clothed in off-white to tan elongate simple hairs; prolegs with femur and tibia clothed intero-laterally in smoky and tan simple scales and hairs; tarsus clothed in dark scales, terminally each tarsomere clothed in tan scales; meso- and meta-thoracic femora and tibiae clothed in tan elongate hairs and scales, extero-laterally with admixture of dark brown simple scales, tibial spurs one and two are meso- and metatibiae, respectively; primaries dorsally with pale tan to dark brown ground color; basal half line occasionally represented in either black or tan; transverse anterior line when present, geminate, centrally lighter than ground color, direction as in fig. 1; orbicular, when obvious, subcircular, may coalesce with reniform, tan or orangish-tan; median area of ground color, or median shade may be present (as in fig. 2); reniform suboval, smaller end pointed toward costa or apex, colored as in orbicular; transverse posterior line concolorous with transverse anterior line, direction as in fig. 1; subterminal space of ground color; subterminal line irregular in course when discernable, lighter than ground color; terminal line represented by black dots between veins; fringes more yellowish than ground color; ventral surface brownish, irrorated with black; reniform represented by black splotch; transverse posterior line brown; veins between transverse posterior line and fringes slightly outlined in tan; terminal line as in dorsal surface; secondaries dorsally off-white, basally slightly darker than apically; distal dot dark brown; terminal line dark brown (as in figures 1, 2, and 4); ventrally as in dorsal surface, except costal area darker.

Abdomen dorsally clothed in admixture of dark brown and tan simple scales; terminally clothed in tan elongate scales and simple hairs. Genitalia as in figures 5 and 6.

Greatest expanse of forewing 14-17mm.

Female: As in male, except for antennae which are ciliate, fasciculate; tendency for the "*behrensiana* form" by far greatest in this sex. Greatest expanse of forewing averaging slightly larger.

*O. behrensiana* is quite a variable species in dorsal maculation of the primaries. For this reason the correct name of the entity in concern has remained in confusion until recently. The species is widespread in California, ranging from San Diego County north into Del Norte County, and from sea level into the Sierra Nevada Mountains.



Fig. 5 *O. behrensiana*, male genitalia minus aedeagus; Bauer-Buckett Slide No. 68B27-50. Anderson Springs, Lake County, California, 21 March 1949 (W. R. Bauer).

Fig. 6 *O. behrensiana*, aedeagus of male genitalia. Data same as fig. 5.

Specimens of "*macona*" were sent to Dr. F. H. Rindge of the American Museum of Natural History, New York, where he graciously made type comparison with Smith's type of *T. macona*. The conspecificity of the specimens sent by the author with the type was confirmed.

Specimens of *behrensiana* were also sent for type comparison to Dr. I. W. B. Nye of the British Museum of Natural History, London. Unfortunately, the type female is lacking an abdomen, so genitalic comparison was impossible at this time; the type is otherwise in excellent condition.

I would like to extend my appreciation to both Dr. Rindge and to Dr. Nye for their cooperation in this project, and to Mr. George M. Buxton of this Bureau for the photographs contained herein.

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